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Immigrant Businesses in Knowledge-based Industries

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- ^r revised
- x suppressed to meet the confidentiality requirements of the *Statistics Act*
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Immigrant Businesses in Knowledge-based Industries

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This article in the *Economic Insights* series describes the extent to which immigrant-owned businesses are in the 'knowledge-based' economy, in the more traditional ethnic economy, or in other industrial sectors. It further outlines the differences among immigrant classes (family, refugee, business and economic classes) in the types of businesses owned. The analysis focuses on two types of businesses: privately-owned incorporated companies and the unincorporated self-employed.

Introduction

Traditionally, much of the research on immigrant-owned businesses focused on the ethnic economy, that is, the extent to which demand for specialized goods by particular ethnic groups provides opportunities for immigrant entrepreneurs in those communities. This is reflected in immigrant-owned grocery stores, restaurants, and other retail and service firms catering to niche markets. More recently, attention has shifted towards the role of immigrant entrepreneurs in the broader economy, and specifically in high-tech and knowledge-based businesses.

Little is known about the nature of immigrant-owned businesses in Canada. Because of data limitations, studies have tended to centre on immigrant self-employment, thereby excluding large segments of immigrant business ownership. To address this gap, this analysis uses 2010 data from Statistics Canada's Canadian Employer-Employee Dynamics Database to describe immigrant-owned firms, in particular the extent to which they are in knowledge-based industries (KBIs) or in more traditional industries such as retail trade and food services. In addition, differences in industrial distribution by immigrant class (family, refugee, business, and economic classes¹) are examined. This study builds on an earlier study based on the same data set, which showed that after a period of adjustment and integration, immigrants have a higher rate of business ownership than the Canadian-born (Green et al. 2016). However, immigrant-owned private incorporated companies tend to be smaller than those owned by the Canadian-born, with these firms employing an average of four and seven paid workers respectively. The rate of unincorporated self-employment is also higher among immigrants than the Canadian-born.

The analysis focuses on two types of businesses. The first is private incorporated businesses, which are considered to

be immigrant-owned if at least one owner is an immigrant. Owners with at least a 10% share of the company are identified. Only private incorporated businesses with employees are included. The second is businesses owned by the unincorporated self-employed. The vast majority of these businesses do not have employees. For about 55% of unincorporated self-employed immigrants, their business is their main economic activity and self-employment is their main source of earnings (Green et al. 2016). They are referred to as primarily self-employed and the businesses they own are included in this study. The remaining 45% are excluded because self-employment is a secondary economic activity as earnings from paid jobs exceed those from self-employment.²

Businesses owned by immigrants aged 18 to 69 who entered Canada since 1980 are the focus of the analysis. The comparison group consists of businesses owned by the Canadian-born plus immigrants who came to Canada before 1980 (collectively referred to as 'the Canadian-born,' as 93% were born in Canada).

Industrial distribution of immigrant-owned firms

Approximately 60% of immigrant-owned private incorporated companies were in six broad industry sectors in 2010. These were: professional scientific and technical services; retail trade; accommodation and food services; transportation and warehousing; construction; and health care and social assistance (Table 1).³ Primarily self-employed immigrants were found in somewhat different industries, but again the top six accounted for a large share, at over 75%. These were: real estate, rental and leasing; administrative and support, waste management and remediation services (for example, janitorial); health care and social assistance; professional, scientific and technical services; transportation and warehousing; and construction.

1. The business class, which is normally identified as part of the economic class, is treated separately in this analysis since immigrants in this category are selected based on their willingness to start a business or invest in Canada. The business class consists of three subclasses: entrepreneurs, the self-employed, and investors.
2. Ownership of publicly traded companies is also excluded because such ownership is usually widely dispersed, and stockholders typically have little direct effect on the management and direction of the company.
3. Approximately 54% of private incorporated firms owned by the Canadian-born were in the top six industries.



Table 1

Industrial distribution of private businesses, by ownership and two-digit NAICS industry code, Canada, 2010

Industry (NAICS code)	Private incorporated firms		Primarily self-employed	
	Immigrant-owned ¹	Canadian-born-owned ²	Immigrant-owned	Canadian-born-owned
	percent distribution			
Unknown	13.6	6.3	...	...
Agriculture, forestry, fishing and hunting (11)	1.2	4.8	2.0	11.0
Mining, quarrying, and oil and gas extraction (21)	0.2	1.2	0.1	0.2
Utilities (22)	0.0	0.1	0.0	0.1
Construction (23)	7.3	14.0	9.6	9.2
Manufacturing (31 to 33)	3.9	5.4	1.6	1.3
Wholesale trade (41)	5.3	5.4	1.1	1.0
Retail trade (44 and 45)	11.2	9.6	6.0	4.5
Transportation and warehousing (48 and 49)	8.5	4.5	10.0	3.7
Information and cultural industries (51)	1.0	1.3	0.9	1.1
Finance and insurance (52)	1.5	3.3	2.1	2.1
Real estate and rental and leasing (53)	2.5	4.1	19.9	19.4
Professional, scientific and technical services (54)	14.3	13.8	10.5	12.7
Management of companies and enterprises (55)	0.6	1.7	0.0	0.0
Administrative and support, waste management and remediation services (56)	3.6	4.6	15.7	11.2
Educational services (61)	1.1	0.9	1.4	0.9
Health care and social assistance (62)	7.2	6.1	10.7	10.4
Arts, entertainment and recreation (71)	0.6	1.4	1.7	3.0
Accommodation and food services (72)	11.1	5.1	1.2	1.0
Other services (except public administration) (81)	5.4	6.4	5.5	7.1
Public administration (91)	0.0	0.0	...	...
All industries	100.0	100.0	100.0	100.0
	number			
Total count	144,350	642,840	399,140	1,328,130

... not applicable

1. Immigrants entering Canada since 1980.

2. Canadian-born plus immigrants entering Canada before 1980.

Notes: Industry codes are taken from the North American Industry Classification System (NAICS) Canada 2012. Percentages may not add up to 100.0% because of rounding.**Source:** Statistics Canada, Canadian Employer–Employee Dynamics Database.

To provide a more nuanced perspective, this analysis focuses on 18 detailed industries—industries that accounted for at least 2% of immigrant-owned private incorporated companies or at least 2% of businesses owned by primarily self-employed immigrants in 2010. This is a combination of industries with a four-digit NAICS⁴ code, and two-digit industries that include not only more traditional immigrant industries such as retail trade, food services, and transit and ground passenger transportation, but also engineering and information technology (IT) industries such as computer systems design; architectural, engineering and related services; and management, scientific and technical consulting services.⁵

A number of these detailed industries were aggregated to form the KBI sector—a narrow band of science- and technology-related firms. Lee and Has (1996) used an industry's research and development activity and the educational attainment of its workforce to determine if it is knowledge-based.⁶ Their list was updated by Innovation, Science and Economic Development (ISED) and includes engineering and science-based manufacturers, telecommunications, data processing, computer systems design, and consulting services (Table 2).

4. North American Industrial Classification System (NAICS) Canada 2012.

5. For this analysis, engineering and IT industries include management, scientific and technical consulting services; architectural, engineering and related services; scientific research and development services; highway, street and bridge construction; electric power generation, transmission and distribution; computer systems design and related services; computer and peripheral equipment manufacturing; semiconductor and other electronic component manufacturing; and telecommunications.

6. The original classification of the KBI sector was presented in Lee and Has (1996). The approach is described in various knowledge-based-sector reports on the Industry Canada website (for example, Gera and Massé [1996]) and was used in a Statistics Canada paper (Morissette, Ostrovsky and Picot 2004).

Table 2
Industries in knowledge-based category, as defined by
Innovation, Science and Economic Development Canada

NAICS code	Industry
3254	Pharmaceutical and medical manufacturing
3333	Commercial and service industry machinery manufacturing
3341	Computer and peripheral equipment manufacturing
3342	Telephone apparatus manufacturing
3342	Radio and television broadcasting and wireless communications equipment manufacturing
3342	Other communications equipment manufacturing
3343	Audio and video equipment manufacturing
3344	Semiconductor and other electronic component manufacturing
3345	Navigational and guidance instruments manufacturing
3345	Measuring, medical and controlling Devices manufacturing
3359	Communication and energy wire and cable manufacturing
3364	Aerospace product and parts manufacturing
5112	Software publishers
5121	Motion picture and video production
5121	Post-production and other motion picture and video industries
5152	Pay and specialty television
5171	Wired telecommunications carriers (except cable)
5171	Cable and other program distribution
5172	Wireless telecommunications carriers (except satellite)
5174	Satellite telecommunications
5179	Other telecommunications
5182	Data processing, hosting, and related services
5413	Geophysical surveying and mapping services
5413	Surveying and mapping (except geophysical) services
5415	Computer systems design and related services
5416	Environmental consulting services
5416	Other scientific and technical consulting services
5417	Research and development in physical, engineering and life sciences
5419	All other professional, scientific and technical services

Note: NAICS: North American Industry Classification System.

Source: Government of Canada, 2000, *Comparison and Reconciliation of SIC and NAICS Industry Codes Used to Define Knowledge-Based Industries (KBIs)*.

As shown at the bottom of Table 3, 13.2% of private incorporated businesses owned by immigrants were located in the KBI sector compared with 11.1% of private incorporated businesses owned by the Canadian-born. The larger share of immigrant-owned firms in the KBI sector is consistent with the results of a 2011 survey of small and medium-sized enterprises (Statistics Canada, n.d.), which showed that while immigrants accounted for 22% of all business owners, they accounted for 28% of business owners in the knowledge-based economy. However, because immigrant-owned firms tend to be relatively small, immigrants may not necessarily account for relatively larger shares of employment or output in these industries.

Looking more closely, the share of immigrant-owned private incorporated businesses was higher than the share of Canadian-born owned businesses in computer systems design and related services (at 6.2% and 2.8% respectively, but lower in management, scientific and technical consulting services (at 2.7% and 3.6% respectively). The share of private incorporated businesses owned by immigrants was also higher in industries such as retail trade, truck transportation, and food services and drinking places.

Among the primarily self-employed, 8.0% of immigrant businesses were in the KBI sector, a share that was comparable to Canadian-born owned businesses, at 7.4%. Large and comparable shares of immigrant- and Canadian-owned businesses were in real estate (lessors of real estate), at 17.0% and 16.3% respectively. Industries in which relatively large shares of primarily self-employed immigrants were located included transit and ground passenger transportation, truck transportation, retail trade, services to buildings and dwellings, and child day-care services.



Table 3

Detailed industrial distribution of immigrant and Canadian-born owners of privately-owned incorporated companies, and primarily self-employed, Canada, 2010

Industry (NAICS code)	Private incorporated firms		Primarily self-employed	
	Immigrant-owned ¹	Canadian-born-owned ²	Immigrant-owned	Canadian-born-owned
	percent distribution			
Construction of buildings (236)	2.2	4.3	3.2	2.8
Specialty trade contractors (238)	4.8	8.6	6.3	6.3
Manufacturing (31 to 33)	3.9	5.4	1.6	1.3
Wholesale trade (41)	5.3	5.4	1.1	1.0
Retail trade ³ (44 and 45)	11.2	9.6	6.0	4.5
Truck transportation (484)	6.8	3.1	3.8	1.9
Transit and ground passenger transportation ⁴ (485)	0.2	0.3	5.2	1.0
Lessors of real estate (5311)	1.2	1.8	17.0	16.3
Offices of real estate agents and brokers (5312)	0.5	0.7	2.0	2.0
Accounting, tax preparation, bookkeeping and payroll services (5412)	0.9	1.5	2.1	3.4
Architectural, engineering and related services (5413)	2.1	2.2	0.8	0.7
Computer systems design and related services (5415)	6.2	2.8	1.1	0.7
Management, scientific and technical consulting services (5416)	2.7	3.6	4.4	4.0
Services to buildings and dwellings ⁵ (5617)	1.6	1.8	12.5	9.0
Offices of physicians (6211)	3.9	2.8	1.3	2.1
Offices of dentists (6212)	1.4	1.2	0.5	0.6
Child day-care services (6244)	0.4	0.3	6.7	4.4
Food services and drinking places (722)	10.1	4.3	1.0	0.7
All other industries	34.6	40.5	23.5	37.2
Total percent of owners	100.0	100.0	100.0	100.0
	number			
Total	144,350	642,836	399,163	1,328,227
	percent			
Knowledge-based industries	13.2	11.1	8.0	7.4

1. Immigrants aged 18 to 69, who entered Canada since 1980.

2. Canadian-born plus immigrants who entered Canada before 1980; about 93% are Canadian-born.

3. Example: grocery stores, gas stations, clothing stores, auto dealers.

4. Example: taxi, school bus.

5. Example: janitorial, extermination, window cleaning, landscaping.

Notes: Industry codes are taken from the North American Industry Classification System (NAICS) Canada 2012. Percentages may not add up to 100.0% because of rounding.

Source: Statistics Canada, Canadian Employer–Employee Dynamics Database.

Ownership rates by immigrant class

The types of businesses that immigrants own reflect differences in their characteristics, including category of admission. Economic and business class immigrants are selected for economic reasons, while family class immigrants and refugees are not. Economic class principal applicants (PAs) and their spouses tend to be highly educated (CIC 2012) and, relative to the Canadian-born, are more likely to be in engineering and IT occupations (Picot and Hou, 2009). The family and refugee classes have lower levels of educational attainment and are not similarly skewed toward engineering and IT occupations.

These differences likely affect immigrants' level of investment in companies and the types of companies they establish or purchase.

Private incorporated businesses

In 2010, economic class immigrants (PAs and dependants) were about as likely as the Canadian-born to own an incorporated business, but they were 1.8 times as likely to own a company in KBIs, and 2.0 times as likely to own a company in engineering and IT (Table 4).⁷ The tendency for economic class immigrants to own such companies may be related to their higher educational attainment and greater likelihood of being in engineering and IT occupations. If the comparison was with similarly educated Canadian-born adults, ownership rates might

7. Business class PAs also had higher rates of ownership than the Canadian-born in KBIs (1.5 times the Canadian-born), but they were concentrated in more traditional immigrant industries. They were the only immigrant class whose ownership rates of private incorporated companies in retail and food services sectors were higher than those of the Canadian-born—3.1 times.

not differ. However, the data needed to test this possibility are not available. Nonetheless, the higher ownership rates among economic class immigrants suggest that this group's contribution to the development of KBIs and engineering and IT industries was greater than their numbers would suggest.

Compared with the Canadian-born, family class immigrants had lower ownership rates of private incorporated businesses in KBI (0.7) but higher ownership rates in retail and food services (1.6). The same was true for refugees (Table 4).

Table 4
Likelihood of an immigrant¹ owning a private incorporated business compared to the Canadian-born,² selected industries, by immigrant class, 2010

	All immigrants	Immigrant class		
		Family	Economic	Refugee
		ratio		
All industries	1.0 ³	0.9	1.0	0.7
Industry group				
Knowledge-based industries	1.2	0.7	1.8 ⁴	0.5
Engineering and information technology	1.3	0.7	2.0	0.5
Retail (grocery) and food services (restaurant)	1.7	1.6	1.5	1.6
Taxi, janitorial, landscaping	...	...	...	...
Lessor of real estate	...	...	...	...

... not applicable

1. Immigrants aged 18 to 69, who entered Canada since 1980.

2. Canadian-born aged 18 to 69 plus immigrants entering before 1980; about 93% are Canadian-born.

3. This number indicates that immigrants as a whole were as likely as the Canadian-born to own a private incorporated company.

4. This number indicates that an economic class immigrant was 1.8 times as likely as the Canadian-born to own a private incorporated company in the knowledge-based industries.

Source: Statistics Canada, Canadian Employer–Employee Dynamics Database.

Primarily self-employed

While immigrants in the economic, family, and refugee classes were 1.3 to 1.6 times as likely as the Canadian-born to be primarily self-employed, rates varied substantially by industry (Table 5). The economic class had the highest relative rates of primary self-employment in KBIs and engineering and IT industries, at about 2 times that of the Canadian-born, and relative rates of 1.9 to 1.8 in retail and food services and taxi, janitorial and landscaping. Family class immigrants and refugees were about as likely as the Canadian-born to be self-employed in KBIs and engineering and IT industries, with rates of 1.0 to 1.2, but were far more likely than the Canadian-born to be primarily self-employed in retail and food services and taxi, janitorial and landscaping, with rates of 1.7 to 2.7.

Table 5
Likelihood of an immigrant¹ being primarily self-employed (unincorporated) compared with the Canadian-born,² by immigrant class, selected industries, 2010

	All immigrants	Immigrant class		
		Family	Economic	Refugee
		ratio		
All industries	1.4 ³	1.4	1.3	1.6
Industry group				
Knowledge-based industries	1.6	1.1	2.0 ⁴	1.0
Engineering and information technology	1.6	1.2	2.2	1.0
Retail (grocery) and food services (restaurant)	1.9	1.7	1.9	2.1
Taxi, janitorial, landscaping	2.5	2.7	1.8	2.1
Lessor of real estate	1.5	1.2	2.2	1.1

1. Immigrants aged 18 to 69, who entered Canada since 1980.

2. Canadian-born aged 18 to 69 plus immigrants entering before 1980; about 93% are Canadian-born.

3. This number indicates that immigrants were 1.4 times as likely as the Canadian-born to be self-employed.

4. This number indicates that economic class immigrants were 2.0 times as likely as the Canadian-born to be self-employed in knowledge-based industries.

Source: Statistics Canada, Canadian Employer–Employee Dynamics Database.

Distribution across industries, by immigrant class

Ownership rates do not indicate the industries in which immigrant businesses are concentrated. Immigrants may have a high ownership rate in a particular industry, but if the industry is small, it would account for few immigrant businesses overall. Hence, the analysis now identifies the industries in which most immigrant businesses are found.

Economic class principal applicants and their dependants

Two nodes of industry concentration were evident among private incorporated companies owned by the economic class PAs; almost one-quarter (22.9%) were in KBIs, and almost one-fifth were in retail trade or food services (Table 6). The businesses of the primarily self-employed economic class PAs tended to be in less skilled sectors: 16.8% were lessors of real estate, 10.5% were in services to buildings and dwellings; and 6.6% were in retail trade (Table 7). Even so, 13.8% were in KBIs, compared with 7.4% of the self-employed Canadian-born (Tables 7 and 3).

Of the incorporated businesses owned by dependants of economic PAs, 21.9% were in retail trade or food services, and 14.4% were in KBIs. Relative to the Canadian-born, relatively large shares were in computer systems design and offices of physicians (Table 6 and Table 3). Primary self-employment among economic class dependants was concentrated in real estate leasing (22.6%), services to buildings and dwellings (11.9%), and retail trade (6.7%). Of primary self-employment among the dependants of economic PAs, 9.0% was in KBIs, compared with 7.4% among the Canadian-born.



Table 6
Detailed industrial distribution of immigrant¹ owners of privately-owned incorporated companies, by immigrant class,
Canada, 2010

Industry (NAICS code)	Immigrant class				
	Family	Economic ²	Business ²	Dependants ³	Refugees
	percent distribution				
Construction of buildings (236)	2.5	1.6	2.4	1.7	2.9
Specialty trade contractors (238)	6.7	2.9	1.5	2.6	7.8
Manufacturing (31 to 33)	3.7	4.0	5.2	3.4	4.5
Wholesale trade (41)	3.8	5.8	13.1	6.3	3.1
Retail trade (44 and 45)	10.0	10.7	16.3	12.4	11.1
Truck transportation (484)	13.0	3.1	1.2	2.3	9.8
Transit and ground passenger transportation (485)	0.3	0.1	0.1	0.1	0.4
Lessors of real estate (5311)	1.0	0.8	3.5	1.6	0.9
Offices of real estate agents and brokers (5312)	0.4	0.5	0.8	0.5	0.3
Accounting, tax preparation, bookkeeping and payroll services (5412)	0.7	1.2	0.3	1.0	0.6
Architectural, engineering and related services (5413)	1.2	3.7	0.5	2.1	1.7
Computer systems design and related services (5415)	3.2	11.8	1.0	6.8	3.4
Management, scientific and technical consulting services (5416)	2.1	4.1	2.2	3.2	1.2
Services to buildings and dwellings (5617)	2.1	0.9	0.7	1.0	2.7
Offices of physicians (6211)	2.7	5.7	0.6	5.6	2.5
Offices of dentists (6212)	1.3	1.0	0.5	2.5	1.5
Child day-care services (6244)	0.3	0.3	0.3	0.7	0.3
Food services and drinking places (722)	10.6	7.9	9.9	9.5	13.3
All other industries	34.4	33.8	40.1	36.9	32.0
Total percent of owners	100.0	100.0	100.0	100.0	100.0
Total	44,199	38,659	number		
			7,266	29,318	17,035
Knowledge-based industries	8.2	22.9	percent		
			5.0	14.4	7.5

1. Immigrants aged 18 to 69, who entered Canada since 1980.

2. Principal applicants only.

3. Dependents of business and economic class principal applicants.

Notes: Industry codes are taken from the North American Industry Classification System (NAICS) Canada 2012. Percentages may not add up to 100.0% because of rounding.

Source: Statistics Canada, Canadian Employer–Employee Dynamics Database.

Table 7

Detailed industrial distribution of primarily self-employed (unincorporated) immigrants,¹ by immigrant class, Canada, 2010

Industry (NAICS code)	Immigrant class				
	Family	Economic ²	Business ²	Dependants ³	Refugees
	percent distribution				
Construction of buildings (236)	3.5	2.6	1.8	2.0	4.9
Specialty trade contractors (238)	6.9	5.0	2.6	3.7	10.1
Manufacturing (31 to 33)	1.7	1.5	1.5	1.3	1.8
Wholesale trade (41)	1.0	1.3	1.4	1.1	1.0
Retail trade (44 and 45)	5.3	6.6	7.6	6.7	5.5
Truck transportation (484)	5.4	2.5	1.0	1.5	6.0
Transit and ground passenger transportation (485)	5.9	5.1	0.9	1.1	9.4
Lessors of real estate (5311)	13.9	16.8	37.9	22.6	11.5
Offices of real estate agents and brokers (5312)	1.6	2.8	1.5	2.3	1.4
Accounting, tax preparation, bookkeeping and payroll services (5412)	1.9	2.8	1.2	2.5	1.3
Architectural, engineering and related services (5413)	0.4	1.6	0.5	0.7	0.5
Computer systems design and related services (5415)	0.7	2.5	0.3	1.4	0.6
Management, scientific and technical consulting services (5416)	3.3	7.4	5.7	4.9	2.5
Services to buildings and dwellings (5617)	13.0	10.5	8.2	11.9	14.8
Offices of physicians (6211)	0.9	2.1	0.3	1.8	0.7
Offices of dentists (6212)	0.4	0.4	0.2	0.9	0.4
Child day-care services (6244)	10.7	2.9	1.3	6.8	5.3
Food services and drinking places (722)	1.0	0.9	1.0	0.9	1.1
All other industries	22.4	24.6	25.0	26.1	21.0
Total	100.0	100.0	100.0	100.0	100.0
Total	119,094	81,116	number		
			percent		
			16,070	88,902	66,056
Knowledge-based industries	5.8	13.8	7.5	9.0	4.7

1. Immigrants aged 18 to 69, who entered Canada since 1980.

2. Principal applicants only.

3. Dependents of business and economic class principal applicants.

Notes: Industry codes are taken from the North American Industry Classification System (NAICS) Canada 2012. Percentages may not add up to 100.0% because of rounding.

Source: Statistics Canada, Canadian Employer–Employee Dynamics Database.



Business class principal applicants

Incorporated firms owned by business class PAs were clustered in wholesale trade, retail trade, and food services, which together accounted for almost 40% of them (see Picot and Hou [2009]). Only 5% were in KBIs compared to 22.9% of the private incorporated firms owned by economic class PAs and 8.2% of owned by family class immigrants.

Of the business class PAs who were primarily self-employed, 37.9% were in real estate leasing. This share is far larger than that observed among other immigrants and the Canadian-born.

Family class

The private incorporated companies of the family class immigrants were clustered in retail trade and food services (20.6%) and truck transportation (13%) (Table 6). Firms of Canadian-born owners were less concentrated in these industries.

Among family class immigrants in primary self-employment, prominent industries include lessors of real estate (13.9%), services to buildings and dwellings (13.0%) and child day-care services (10.7%) (Table 7). Self-employed family class immigrants were under-represented in KBIs and the engineering and IT sectors.

Refugee class

Almost one-quarter of the private incorporated businesses owned by refugees were in retail trade and food services. Other leading industries include specialty trade contracting and truck transportation. Incorporated firms owned by refugees were under-represented in KBIs relative to the Canadian-born, but were about as likely to be in computer systems design.

Primarily self-employed refugees were concentrated in services to buildings and dwellings (14.8%), lessors of real estate (11.5%) and specialty trade contractors (10.1%). Like family class immigrants, primarily self-employed refugees were under-represented in KBIs relative to the Canadian born.

Immigrant owners of knowledge-based industry firms likely to be in the economic class

In 2010, about 48% of immigrant owners of incorporated firms in the KBIs were economic PAs, although they accounted for only 20% of all immigrants. Close to a quarter of immigrant owners of KBI companies were dependants of economic class PAs. Thus, the economic class accounted for over 70% of all owners of immigrant-owned incorporated KBI companies. Approximately one-fifth of immigrant owners were family class, and 7% were refugees. Fewer than 2% of immigrant owners in these industries were business class PAs. Patterns were similar among the self-employed (unincorporated)—self-employed immigrants in KBIs were heavily concentrated in the economic class.

Conclusion

American studies suggest that immigration is having a positive effect on the creation and operation of high-tech companies (for example, see Saxenian [2002]), and on product and process innovation in general. These effects are related to highly skilled immigrants, particularly in the fields of engineering and computer science. For example, Hunt and Gauthier-Loiselle (2010) found that the positive effect on innovation can be entirely explained by the bias among immigrants toward scientific, engineering and IT occupations.

Similar research did not exist in Canada. However, this analysis highlights the extent to which economic class immigrants are engaged in business ownership and self-employment in KBIs, particularly engineering and IT.

As in the United States, these findings may reflect educational attainment. Since the early 1990s, economic class PAs have had higher levels of education than the Canadian-born overall, and have been heavily concentrated in engineering and computer science occupations. While it is possible that the Canadian-born with similar educational attainment may also have high ownership rates in the KBIs, this hypothesis could not be tested in this analysis.

Business class PAs were not similarly concentrated in KBIs. Although they were more likely than the Canadian-born to own businesses in such industries, this was because their overall business ownership rate is high. Their concentration was more in industries such as wholesale trade, retail trade and food services. Among primarily self-employed business class PAs, real estate leasing stood out, as their representation was more than twice as high as that of the Canadian-born self-employed.

Refugee and family class owners were heavily concentrated in more traditional immigrant industries such as retail trade, food services, transit and ground passenger transportation, and services to buildings and dwellings. Primarily self-employed family and refugee class immigrants were less likely than the Canadian-born primarily self-employed to be in KBIs.

Of the immigrant-owned incorporated businesses in the KBIs, one-half were owned by economic class PAs—a group that accounted for 20% of all immigrants. When economic class PAs and their dependants are considered together, this group owned more than 70% of immigrant firms in these sectors. In more traditional industries, immigrant ownership was widely dispersed among all immigrant classes.



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